

Highly Erodible Soil Map Unit List - Eastern Beltrami County, MN

C = .15

R = 90

This data is only to be used for HEL determinations. This is the "frozen data" based on 01/01/1990 information.

Values other than "HELC" should only be used for PHEL.

Mapunit	Mapunit Name	HELC	T	K	I	LS
J9	Aeric Glossaqualfs, clayey subsoil	NHEL	5	0.3	86	0.32
J5	Alfic Udipsammets, nearly level and undulating	NHEL	5	0.2	134	0.32
496B	Andrusia loamy sand, 1 to 6 percent slopes	NHEL	4	0.2	134	0.32
C496B	Andrusia loamy sand, 1 to 6 percent slopes	NHEL	4	0.2	134	0.32
496D	Andrusia loamy sand, 12 to 25 percent slopes	PHEL	4	0.2	134	2.20
496C	Andrusia loamy sand, 6 to 12 percent slopes	NHEL	4	0.2	134	0.99
J10	Aqualfs	NHEL	5	0.2	134	0.11
J19	Aquic Eutroboralfs, loamy, nearly level and undulating	NHEL	4	0.2	134	0.32
1033	Aquic Udipsammets-Aquents complex, (lake beaches, sandy)	NHEL	5	0.2	134	0.11
503B	Balmlake fine sandy loam, 1 to 6 percent slopes	NHEL	5	0.3	86	0.32
503D	Balmlake fine sandy loam, 12 to 25 percent slopes	HEL	5	0.3	86	2.20
503C	Balmlake fine sandy loam, 6 to 12 percent slopes	NHEL	5	0.3	86	0.99
C503C	Balmlake fine sandy loam, 6 to 12 percent slopes	NHEL	5	0.3	86	0.99
167	Baudette silt loam	NHEL	5	0.4	48	0.15
125	Beltrami fine sandy loam	NHEL	5	0.2	86	0.15
C125	Beltrami fine sandy loam	NHEL	5	0.2	86	0.15
272	Bemidji loamy sand	NHEL	5	0.1	134	0.15
B211A	Berner and Cathro soils, ponded, des moines, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
I71A	Berner and Cathro soils, ponded, mlra 56, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
B205A	Berner muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
B109A	Bowstring and Fluviaquents soils, des moines, 0 to 2 percent slopes, frequently flooded	NHEL	5	0.0	134	0.11
561	Bullwinkle muck	NHEL	5	0.0	134	0.11
C561	Bullwinkle muck	NHEL	5	0.0	134	0.11
702	Bullwinkle-Cathro complex	NHEL	5	0.0	134	0.11
544	Cathro muck	NHEL	5	0.0	134	0.11
C544	Cathro muck	NHEL	5	0.0	134	0.11
I8A	Cathro muck, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
B202A	Cathro muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
1807	Cathro muck, ponded	NHEL	5	0.0	134	0.11
C1807	Cathro muck, ponded	NHEL	5	0.0	134	0.11
B201A	Chilgren fine sandy loam, des moines, 0 to 2 percent slopes	NHEL	5	0.3	56	0.11
404	Chilgren loam	NHEL	5	0.3	56	0.11
1922	Chilgren sandy loam, very stony	NHEL	5	0.3	86	0.11
117	Cormant loamy fine sand	NHEL	5	0.2	134	0.11
2032A	Cormant loamy fine sand, 0 to 2 percent slopes	NHEL	5	0.2	134	0.11
1206	Cormant-Redby complex, 0 to 2 percent slopes	NHEL	5	0.2	134	0.15

620B	Cutaway loamy fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
C620B	Cutaway loamy fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
620C	Cutaway loamy fine sand, 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
N80	Cutaway-Hiwood association, nearly level and undulating	NHEL	5	0.2	134	0.32
505B	Debs silt loam, 1 to 6 percent slopes	NHEL	5	0.3	56	0.32
505C	Debs silt loam, 6 to 12 percent slopes	PHEL	5	0.3	56	0.99
C505C	Debs silt loam, 6 to 12 percent slopes	PHEL	5	0.3	56	0.99
2021B	Debs, till substratum-Snellman complex, 1 to 8 percent slopes	NHEL	5	0.3	56	0.47
2021E	Debs, till substratum-Snellman complex, 15 to 30 percent slopes	HEL	5	0.3	56	2.60
2021C	Debs, till substratum-Snellman complex, 8 to 15 percent slopes	PHEL	5	0.3	56	1.80
547	Deerwood muck	NHEL	3	0.0	134	0.11
I11A	Deerwood muck, 0 to 1 percent slopes	NHEL	3	0.0	134	0.11
B76A	Deford-Leafriver complex, 0 to 2 percent slopes	NHEL	5	0.0	134	0.11
2018B	Eagleview-Two Inlets complex, 1 to 8 percent slopes, pitted	NHEL	5	0.2	134	0.47
2018E	Eagleview-Two Inlets complex, 15 to 30 percent slopes	PHEL	5	0.2	134	2.60
2018C	Eagleview-Two Inlets complex, 8 to 15 percent slopes, pitted	NHEL	5	0.2	134	1.80
565	Eckvoll loamy fine sand	NHEL	5	0.2	134	0.11
I12A	Eckvoll loamy fine sand, 0 to 3 percent slopes	NHEL	5	0.2	134	0.11
I805A	Eckvoll loamy fine sand, 0 to 3 percent slopes, very stony	NHEL	5	0.2	134	0.11
B210A	Eckvoll loamy fine sand, des moines, 0 to 3 percent slopes	NHEL	5	0.2	134	0.11
1925	Eckvoll loamy fine sand, very stony	NHEL	5	0.2	134	0.15
616	Effie silt loam	NHEL	3	0.4	56	0.11
1200	Egglake loam, 0 to 2 percent slopes	NHEL	5	0.3	56	0.11
2023A	Egglake-Spooner, till substratum complex, 0 to 2 percent slopes	NHEL	5	0.4	56	0.11
1935	Epoufette muck	NHEL	4	0.1	134	0.11
191	Epoufette sandy loam	NHEL	4	0.2	86	0.11
2035A	Epoufette sandy loam, 0 to 2 percent slopes	NHEL	4	0.2	86	0.11
2025A	Fluvaquents, frequently flooded-Egglake-Sax complex, 0 to 2 percent slopes	NHEL	5	0.3	56	0.11
1057	Fluvaquents, frequently flooded-Hapludalfs complex, 0 to 35 percent slopes	PHEL	4	0.2	86	3.00
B200A	Garnes fine sandy loam, des moines, 0 to 3 percent slopes	NHEL	5	0.3	48	0.15
1923	Garnes fine sandy loam, very stony	NHEL	5	0.3	86	0.15
77	Garnes loam	NHEL	5	0.3	48	0.15
J8	Glossic Eutroboralfs, loamy, rolling and hilly	PHEL	4	0.2	134	2.20
B78B	Graycalm-Grettum complex, 1 to 8 percent slopes	NHEL	5	0.2	134	0.47
867B	Graycalm-Menahga complex, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
C867B	Graycalm-Menahga complex, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
867C	Graycalm-Menahga complex, 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
C867C	Graycalm-Menahga complex, 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
J6	Graycalm-Typic Udipsammets association, nearly level and undulating	NHEL	5	0.2	134	0.32
549	Greenwood peat	NHEL	5	0.0	38	0.11
C549	Greenwood peat	NHEL	5	0.0	38	0.11
560	Greenwood-Lobo complex	NHEL	5	0.0	38	0.11
482	Grygla loamy fine sand	NHEL	5	0.2	134	0.11

I756A	Grygla loamy fine sand, 0 to 2 percent slopes	NHEL	5	0.2	134	0.11
I116A	Grygla loamy fine sand, dense till, 0 to 2 percent slopes	NHEL	5	0.2	134	0.11
B208A	Grygla loamy fine sand, des moines, 0 to 2 percent slopes	NHEL	5	0.2	134	0.11
1924	Grygla loamy fine sand, very stony	NHEL	5	0.2	134	0.11
1878	Hamre muck	NHEL	5	0.0	134	0.11
C1878	Hamre muck	NHEL	5	0.0	134	0.11
I27A	Hamre muck, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
B206A	Hamre muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
1804	Hamre muck, ponded	NHEL	5	0.0	134	0.11
1113	Haslie, Seelyeville and Cathro soils, ponded	NHEL	5	0.0	134	0.11
X01	Histosols, depressional	NHEL	5	0.0	134	0.11
2030A	Hiwood fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.15
48	Hiwood loamy fine sand	NHEL	5	0.2	134	0.15
O92	Hiwood-Zimmerman association, nearly level to hilly	NHEL	5	0.2	134	0.32
N84	Humaquepts	NHEL	5	0.0	134	0.11
O97	Humaquepts, sandy	NHEL	5	0.0	134	0.11
205	Karlstad loamy sand	NHEL	3	0.2	134	0.15
2037A	Karlstad loamy sand, 0 to 3 percent slopes	NHEL	3	0.2	134	0.15
I76A	Karlstad loamy sand, 0 to 3 percent slopes	NHEL	3	0.2	134	0.15
676B	Kost loamy fine sand, 0 to 6 percent slopes	NHEL	5	0.2	134	0.47
481	Kratka fine sandy loam	NHEL	5	0.2	86	0.11
I38A	Kratka fine sandy loam, 0 to 2 percent slopes	NHEL	5	0.2	86	0.11
709B	Lengby sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
709D	Lengby sandy loam, 12 to 25 percent slopes	PHEL	5	0.2	86	2.20
709C	Lengby sandy loam, 6 to 12 percent slopes	NHEL	5	0.2	86	0.99
2026B	Lengby-Snellman complex, 1 to 8 percent slopes	NHEL	5	0.2	86	0.47
2026E	Lengby-Snellman complex, 15 to 30 percent slopes	HEL	5	0.2	86	2.60
2026C	Lengby-Snellman complex, 8 to 15 percent slopes	PHEL	5	0.2	86	1.80
546	Lupton muck	NHEL	5	0.0	134	0.11
C546	Lupton muck	NHEL	5	0.0	134	0.11
543	Markey muck	NHEL	4	0.0	134	0.11
I41A	Markey muck, 0 to 1 percent slopes	NHEL	4	0.0	134	0.11
1808	Markey muck, ponded	NHEL	4	0.0	134	0.11
I42A	Markey muck, ponded, 0 to 1 percent slopes	NHEL	4	0.0	134	0.11
242B	Marquette loamy sand, 1 to 6 percent slopes	HEL	2	0.2	134	0.32
2038B	Marquette loamy sand, 1 to 6 percent slopes, MLRA 88	NHEL	3	0.2	86	0.47
242C	Marquette loamy sand, 6 to 12 percent slopes	HEL	2	0.2	134	0.99
2038C	Marquette loamy sand, 6 to 12 percent slopes, MLRA 88	NHEL	3	0.2	86	0.99
202	Meehan loamy sand	NHEL	5	0.2	134	0.11
2036A	Meehan loamy sand, 0 to 3 percent slopes	NHEL	5	0.2	134	0.15
B77A	Meehan-Deford complex, 0 to 3 percent slopes	NHEL	5	0.2	134	0.11
458C	Menahga loamy sand 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
458B	Menahga loamy sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32

458D	Menahga loamy sand, 12 to 25 percent slopes	PHEL	5	0.2	134	2.20
534	Mooselake mucky peat	NHEL	5	0.0	56	0.11
C534	Mooselake mucky peat	NHEL	5	0.0	56	0.11
621	Morph fine sandy loam	NHEL	5	0.2	86	0.11
1959	Nary cobbly fine sandy loam	NHEL	5	0.2	86	0.15
32D	Nebish fine sandy loam, 12 to 25 percent slopes	HEL	5	0.2	86	2.20
32C	Nebish fine sandy loam, 6 to 12 percent slopes	PHEL	5	0.2	86	0.99
32B	Nebish sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
563	Northwood muck	NHEL	5	0.0	134	0.11
I45A	Northwood muck, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
I777A	Northwood muck, 0 to 1 percent slopes, very stony	NHEL	5	0.0	134	0.11
I81A	Northwood muck, dense till, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
B203A	Northwood muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
1939	Northwood muck, very stony	NHEL	5	0.0	134	0.11
B43A	Northwood-Berner complex, mlra 88, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
280	Pelan sandy loam	NHEL	3	0.2	86	0.15
B207A	Pelan sandy loam, des moines, 0 to 3 percent slopes	NHEL	3	0.2	86	0.15
I72A	Pelan sandy loam, mlra 56, 0 to 3 percent slopes	NHEL	3	0.2	86	0.15
607	Pengilly very fine sandy loam	NHEL	5	0.2	86	0.11
IGp	Pits, gravel and sand	NHEL	5	0.2	134	0.13
GP	Pits, gravel-Udipsammets complex	NHEL	5	0.2	134	0.32
I47A	Poppleton fine sand, 0 to 2 percent slopes	NHEL	5	0.2	134	0.15
N78	Psammentic Eutroboralfs, sandy, nearly level and undulating	NHEL	5	0.2	134	0.32
N79	Psammentic Eutroboralfs, sandy, rolling and hilly	NHEL	5	0.2	134	0.99
O94	Redby fine sand	NHEL	5	0.2	134	0.15
116	Redby loamy fine sand	NHEL	5	0.2	134	0.15
2031A	Redby loamy fine sand, 1 to 3 percent slopes	NHEL	5	0.2	134	0.15
I90A	Redby loamy fine sand, dense till, 0 to 3 percent slopes	NHEL	5	0.2	134	0.15
I50A	Reiner fine sandy loam, 0 to 3 percent slopes	NHEL	5	0.2	134	0.32
B70A	Ricelake-Blomford complex, mlra 88, 0 to 3 percent slopes	NHEL	5	0.2	134	0.15
B60B	Ricelake-Cutaway complex, mlra 88, 1 to 4 percent slopes	NHEL	5	0.2	134	0.15
541	Rifle mucky peat	NHEL	5	0.0	56	0.11
439	Rockwell fine sandy loam	NHEL	5	0.2	86	0.11
I171A	Rockwell fine sandy loam, 0 to 1 percent slopes	NHEL	3	0.2	86	0.11
582	Roliss loam	NHEL	5	0.3	48	0.11
I53A	Roliss loam, 0 to 2 percent slopes	NHEL	5	0.3	48	0.11
B204A	Roliss loam, des moines, 0 to 2 percent slopes	NHEL	5	0.3	48	0.11
545	Rondeau muck	NHEL	5	0.0	134	0.11
712	Rosewood fine sandy loam	NHEL	3	0.2	86	0.11
I55A	Rosewood fine sandy loam, 0 to 2 percent slopes	NHEL	5	0.2	86	0.15
624	Rosy sandy loam	NHEL	5	0.2	86	0.11
625	Sandwick loamy fine sand	NHEL	5	0.2	134	0.11
328B	Sartell loamy fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32

799	Seelyeville and Bowstring soils	NHEL	5	0.0	134	0.11
C799	Seelyeville and Bowstring soils	NHEL	5	0.0	134	0.11
540	Seelyeville muck	NHEL	5	0.0	134	0.11
C540	Seelyeville muck	NHEL	5	0.0	134	0.11
I58A	Seelyeville muck, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
72	Shooker loam	NHEL	5	0.3	56	0.11
765	Smiley loam	NHEL	5	0.2	56	0.11
I59A	Smiley loam, 0 to 2 percent slopes	NHEL	5	0.2	56	0.11
653	Smiley muck	NHEL	5	0.0	134	0.11
I840A	Smiley muck, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
I60A	Smiley mucky loam, depressional, 0 to 1 percent slopes	NHEL	5	0.2	134	0.11
267B	Snellman fine sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
267D	Snellman fine sandy loam, 12 to 25 percent slopes	PHEL	5	0.2	86	2.20
267C	Snellman fine sandy loam, 6 to 12 percent slopes	NHEL	5	0.2	86	0.99
1993B	Snellman-Wykeham complex, 1 to 6 percent slopes	NHEL	5	0.2	86	0.23
2024B	Snellman-Zimmerman complex, 1 to 8 percent slopes, pitted	NHEL	5	0.2	86	0.47
199B	Sol cobbly sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
199C	Sol cobbly sandy loam, 6 to 12 percent slopes	NHEL	5	0.2	86	0.99
147	Spooner silt loam	NHEL	5	0.4	56	0.11
432	Strandquist loam	NHEL	3	0.3	86	0.11
I61A	Strandquist loam, 0 to 2 percent slopes	NHEL	3	0.3	86	0.11
I104A	Strandquist loam, dense till, 0 to 2 percent slopes	NHEL	3	0.3	86	0.11
243	Stuntz fine sandy loam	NHEL	5	0.3	86	0.15
C243	Stuntz fine sandy loam	NHEL	5	0.3	86	0.15
1991	Stuntz loam	NHEL	5	0.3	86	0.11
626B	Suomi loam, 1 to 6 percent slopes	NHEL	3	0.4	56	0.32
626D	Suomi loam, 12 to 25 percent slopes	HEL	3	0.4	56	2.20
626C	Suomi loam, 6 to 12 percent slopes	HEL	3	0.4	56	0.99
H88	Suomi-Aeric Glossaqualfs, loamy association, gently undulating to hilly	HEL	3	0.4	56	0.99
H87	Suomi-Aeric Glossaqualfs, loamy association, nearly level and undulating	NHEL	3	0.4	56	0.32
514	Tacoosh muck	NHEL	5	0.0	134	0.11
628	Talmoon muck	NHEL	5	0.0	134	0.11
C628	Talmoon muck	NHEL	5	0.0	134	0.11
627	Tawas muck	NHEL	4	0.0	134	0.11
X02	Typic Borohemists, acid	NHEL	5	0.0	134	0.11
X05	Typic Borohemists, nonacid	NHEL	5	0.0	134	0.11
X03	Typic Borohemists, nonacid-Typic Borosaprists association	NHEL	5	0.0	134	0.11
X04	Typic Borosaprists-Bowstring association	NHEL	5	0.0	134	0.11
N77	Udipsammets, nearly level and undulating	NHEL	5	0.2	134	0.32
1086	Urban land-Cormant complex	NHEL	5	0.2	134	0.11
1085B	Urban land-Graycalm complex, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
1085C	Urban land-Graycalm complex, 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
240B	Warba fine sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32

C240B	Warba fine sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
240C	Warba fine sandy loam, 6 to 12 percent slopes	NHEL	5	0.2	86	0.99
C240C	Warba fine sandy loam, 6 to 12 percent slopes	NHEL	5	0.2	86	0.99
J7	Warba-Stuntz association, nearly level and undulating	NHEL	5	0.2	86	0.32
J11	Warba-Stuntz-Arenic Eutroboralfs association, nearly level and undulating	NHEL	5	0.3	86	0.32
538	Waskish peat	NHEL	5	0.0	134	0.11
CW	Water	NHEL				
IWa	Water	NHEL				
W	Water	NHEL				
M-W	Water, miscellaneous	NHEL				
B58B	Wurtsmith-Meehan complex, 0 to 4 percent slopes	NHEL	5	0.2	134	0.11
121	Wykeham fine sandy loam	NHEL	5	0.2	86	0.32
2022B	Wykeham-Baudette, till substratum complex, 1 to 4 percent slopes	NHEL	5	0.4	48	0.15
2034B	Zimmerman fine sand, 0 to 6 percent slopes	NHEL	5	0.2	134	0.32
158B	Zimmerman loamy fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
C158B	Zimmerman loamy fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
158C	Zimmerman loamy fine sand, 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
2017B	Zimmerman-Andrusia complex, 1 to 8 percent slopes	NHEL	4	0.2	134	0.32
2017E	Zimmerman-Andrusia complex, 15 to 30 percent slopes	HEL	4	0.2	134	3.00
2017C	Zimmerman-Andrusia complex, 8 to 15 percent slopes	NHEL	4	0.2	134	1.80
2020B	Zimmerman-Snellman complex, 1 to 8 percent slopes	NHEL	5	0.2	86	0.47
2020E	Zimmerman-Snellman complex, 15 to 30 percent slopes	HEL	5	0.2	86	2.60
2020C	Zimmerman-Snellman complex, 8 to 15 percent slopes	PHEL	5	0.2	86	1.80

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1033	Aquic Udipsammets-Aquents complex, (lake beaches, sandy)	NHEL	5	0.2	134	0.11
503B	Balmlake fine sandy loam, 1 to 6 percent slopes	NHEL	5	0.3	86	0.32
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C503C	Balmlake fine sandy loam, 6 to 12 percent slopes	NHEL	5	0.3	86	0.99
167	Baudette silt loam	NHEL	5	0.4	48	0.15
125	Beltrami fine sandy loam	NHEL	5	0.2	86	0.15
C125	Beltrami fine sandy loam	NHEL	5	0.2	86	0.15
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B211A	Berner and Cathro soils, ponded, des moines, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
I71A	Berner and Cathro soils, ponded, mlra 56, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
B205A	Berner muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
B109A	Bowstring and Fluvaquents soils, des moines, 0 to 2 percent slopes, frequently flooded	NHEL	5	0.0	134	0.11
561	Bullwinkle muck	NHEL	5	0.0	134	0.11
C561	Bullwinkle muck	NHEL	5	0.0	134	0.11
702	Bullwinkle-Cathro complex	NHEL	5	0.0	134	0.11
544	Cathro muck	NHEL	5	0.0	134	0.11
C544	Cathro muck	NHEL	5	0.0	134	0.11
I8A	Cathro muck, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
B202A	Cathro muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
1807	Cathro muck, ponded	NHEL	5	0.0	134	0.11
C1807	Cathro muck, ponded	NHEL	5	0.0	134	0.11
B201A	Chilgren fine sandy loam, des moines, 0 to 2 percent slopes	NHEL	5	0.3	56	0.11
404	Chilgren loam	NHEL	5	0.3	56	0.11
1922	Chilgren sandy loam, very stony	NHEL	5	0.3	86	0.11
117	Cormant loamy fine sand	NHEL	5	0.2	134	0.11
2032A	Cormant loamy fine sand, 0 to 2 percent slopes	NHEL	5	0.2	134	0.11
1206	Cormant-Redby complex, 0 to 2 percent slopes	NHEL	5	0.2	134	0.15
620B	Cutaway loamy fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
C620B	Cutaway loamy fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32

620C	Cutaway loamy fine sand, 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
505B	Debs silt loam, 1 to 6 percent slopes	NHEL	5	0.3	56	0.32
505C	Debs silt loam, 6 to 12 percent slopes	PHEL	5	0.3	56	0.99
C505C	Debs silt loam, 6 to 12 percent slopes	PHEL	5	0.3	56	0.99
2021B	Debs, till substratum-Snellman complex, 1 to 8 percent slopes	NHEL	5	0.3	56	0.47
2021E	Debs, till substratum-Snellman complex, 15 to 30 percent slopes	HEL	5	0.3	56	2.60
2021C	Debs, till substratum-Snellman complex, 8 to 15 percent slopes	PHEL	5	0.3	56	1.80
547	Deerwood muck	NHEL	3	0.0	134	0.11
I11A	Deerwood muck, 0 to 1 percent slopes	NHEL	3	0.0	134	0.11
B76A	Deford-Leafriver complex, 0 to 2 percent slopes	NHEL	5	0.0	134	0.11
2018B	Eagleview-Two Inlets complex, 1 to 8 percent slopes, pitted	NHEL	5	0.2	134	0.47
2018E	Eagleview-Two Inlets complex, 15 to 30 percent slopes	PHEL	5	0.2	134	2.60
2018C	Eagleview-Two Inlets complex, 8 to 15 percent slopes, pitted	NHEL	5	0.2	134	1.80
565	Eckvoll loamy fine sand	NHEL	5	0.2	134	0.11
I12A	Eckvoll loamy fine sand, 0 to 3 percent slopes	NHEL	5	0.2	134	0.11
I805A	Eckvoll loamy fine sand, 0 to 3 percent slopes, very stony	NHEL	5	0.2	134	0.11
B210A	Eckvoll loamy fine sand, des moines, 0 to 3 percent slopes	NHEL	5	0.2	134	0.11
1925	Eckvoll loamy fine sand, very stony	NHEL	5	0.2	134	0.15
616	Effie silt loam	NHEL	3	0.4	56	0.11
1200	Egglake loam, 0 to 2 percent slopes	NHEL	5	0.3	56	0.11
2023A	Egglake-Spooner, till substratum complex, 0 to 2 percent slopes	NHEL	5	0.4	56	0.11
1935	Epoufette muck	NHEL	4	0.1	134	0.11
191	Epoufette sandy loam	NHEL	4	0.2	86	0.11
2035A	Epoufette sandy loam, 0 to 2 percent slopes	NHEL	4	0.2	86	0.11
2025A	Fluvaquents, frequently flooded-Egglake-Sax complex, 0 to 2 percent slopes	NHEL	5	0.3	56	0.11
1057	Fluvaquents, frequently flooded-Hapludalfs complex, 0 to 35 percent slopes	PHEL	4	0.2	86	3.00
B200A	Garnes fine sandy loam, des moines, 0 to 3 percent slopes	NHEL	5	0.3	48	0.15
1923	Garnes fine sandy loam, very stony	NHEL	5	0.3	86	0.15
77	Garnes loam	NHEL	5	0.3	48	0.15
J8	Glossic Eutroboralfs, loamy, rolling and hilly	PHEL	4	0.2	134	2.20
B78B	Graycalm-Grettum complex, 1 to 8 percent slopes	NHEL	5	0.2	134	0.47
867B	Graycalm-Menahga complex, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
C867B	Graycalm-Menahga complex, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
867C	Graycalm-Menahga complex, 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
C867C	Graycalm-Menahga complex, 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
J6	Graycalm-Typic Udipsammets association, nearly level and undulating	NHEL	5	0.2	134	0.32
549	Greenwood peat	NHEL	5	0.0	38	0.11
C549	Greenwood peat	NHEL	5	0.0	38	0.11
560	Greenwood-Lobo complex	NHEL	5	0.0	38	0.11
482	Grygla loamy fine sand	NHEL	5	0.2	134	0.11
I756A	Grygla loamy fine sand, 0 to 2 percent slopes	NHEL	5	0.2	134	0.11
I116A	Grygla loamy fine sand, dense till, 0 to 2 percent slopes	NHEL	5	0.2	134	0.11
B208A	Grygla loamy fine sand, des moines, 0 to 2 percent slopes	NHEL	5	0.2	134	0.11

1924	Grygla loamy fine sand, very stony	NHEL	5	0.2	134	0.11
1878	Hamre muck	NHEL	5	0.0	134	0.11
C1878	Hamre muck	NHEL	5	0.0	134	0.11
I27A	Hamre muck, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
B206A	Hamre muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
1804	Hamre muck, ponded	NHEL	5	0.0	134	0.11
1113	Haslie, Seelyeville and Cathro soils, ponded	NHEL	5	0.0	134	0.11
2030A	Hiwood fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.15
48	Hiwood loamy fine sand	NHEL	5	0.2	134	0.15
205	Karlstad loamy sand	NHEL	3	0.2	134	0.15
2037A	Karlstad loamy sand, 0 to 3 percent slopes	NHEL	3	0.2	134	0.15
I76A	Karlstad loamy sand, 0 to 3 percent slopes	NHEL	3	0.2	134	0.15
676B	Kost loamy fine sand, 0 to 6 percent slopes	NHEL	5	0.2	134	0.47
481	Kratka fine sandy loam	NHEL	5	0.2	86	0.11
I38A	Kratka fine sandy loam, 0 to 2 percent slopes	NHEL	5	0.2	86	0.11
709B	Lengby sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
709D	Lengby sandy loam, 12 to 25 percent slopes	PHEL	5	0.2	86	2.20
709C	Lengby sandy loam, 6 to 12 percent slopes	NHEL	5	0.2	86	0.99
2026B	Lengby-Snellman complex, 1 to 8 percent slopes	NHEL	5	0.2	86	0.47
2026E	Lengby-Snellman complex, 15 to 30 percent slopes	HEL	5	0.2	86	2.60
2026C	Lengby-Snellman complex, 8 to 15 percent slopes	PHEL	5	0.2	86	1.80
546	Lupton muck	NHEL	5	0.0	134	0.11
C546	Lupton muck	NHEL	5	0.0	134	0.11
543	Markey muck	NHEL	4	0.0	134	0.11
I41A	Markey muck, 0 to 1 percent slopes	NHEL	4	0.0	134	0.11
1808	Markey muck, ponded	NHEL	4	0.0	134	0.11
I42A	Markey muck, ponded, 0 to 1 percent slopes	NHEL	4	0.0	134	0.11
242B	Marquette loamy sand, 1 to 6 percent slopes	HEL	2	0.2	134	0.32
2038B	Marquette loamy sand, 1 to 6 percent slopes, MLRA 88	NHEL	3	0.2	86	0.47
242C	Marquette loamy sand, 6 to 12 percent slopes	HEL	2	0.2	134	0.99
2038C	Marquette loamy sand, 6 to 12 percent slopes, MLRA 88	NHEL	3	0.2	86	0.99
202	Meehan loamy sand	NHEL	5	0.2	134	0.11
2036A	Meehan loamy sand, 0 to 3 percent slopes	NHEL	5	0.2	134	0.15
B77A	Meehan-Deford complex, 0 to 3 percent slopes	NHEL	5	0.2	134	0.11
458C	Menahga loamy sand 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
458B	Menahga loamy sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
458D	Menahga loamy sand, 12 to 25 percent slopes	PHEL	5	0.2	134	2.20
534	Mooselake mucky peat	NHEL	5	0.0	56	0.11
C534	Mooselake mucky peat	NHEL	5	0.0	56	0.11
621	Morph fine sandy loam	NHEL	5	0.2	86	0.11
1959	Nary cobbly fine sandy loam	NHEL	5	0.2	86	0.15
32D	Nebish fine sandy loam, 12 to 25 percent slopes	HEL	5	0.2	86	2.20
32C	Nebish fine sandy loam, 6 to 12 percent slopes	PHEL	5	0.2	86	0.99

32B	Nebish sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
563	Northwood muck	NHEL	5	0.0	134	0.11
I45A	Northwood muck, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
I777A	Northwood muck, 0 to 1 percent slopes, very stony	NHEL	5	0.0	134	0.11
I81A	Northwood muck, dense till, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
B203A	Northwood muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
1939	Northwood muck, very stony	NHEL	5	0.0	134	0.11
B43A	Northwood-Berner complex, mlra 88, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
280	Pelan sandy loam	NHEL	3	0.2	86	0.15
B207A	Pelan sandy loam, des moines, 0 to 3 percent slopes	NHEL	3	0.2	86	0.15
I72A	Pelan sandy loam, mlra 56, 0 to 3 percent slopes	NHEL	3	0.2	86	0.15
607	Pengilly very fine sandy loam	NHEL	5	0.2	86	0.11
IGp	Pits, gravel and sand	NHEL	5	0.2	134	0.13
GP	Pits, gravel-Udipsammets complex	NHEL	5	0.2	134	0.32
I47A	Poppleton fine sand, 0 to 2 percent slopes	NHEL	5	0.2	134	0.15
116	Redby loamy fine sand	NHEL	5	0.2	134	0.15
2031A	Redby loamy fine sand, 1 to 3 percent slopes	NHEL	5	0.2	134	0.15
I90A	Redby loamy fine sand, dense till, 0 to 3 percent slopes	NHEL	5	0.2	134	0.15
I50A	Reiner fine sandy loam, 0 to 3 percent slopes	NHEL	5	0.2	134	0.32
B70A	Ricelake-Blomford complex, mlra 88, 0 to 3 percent slopes	NHEL	5	0.2	134	0.15
B60B	Ricelake-Cutaway complex, mlra 88, 1 to 4 percent slopes	NHEL	5	0.2	134	0.15
541	Rifle mucky peat	NHEL	5	0.0	56	0.11
439	Rockwell fine sandy loam	NHEL	5	0.2	86	0.11
I171A	Rockwell fine sandy loam, 0 to 1 percent slopes	NHEL	3	0.2	86	0.11
582	Roliss loam	NHEL	5	0.3	48	0.11
I53A	Roliss loam, 0 to 2 percent slopes	NHEL	5	0.3	48	0.11
B204A	Roliss loam, des moines, 0 to 2 percent slopes	NHEL	5	0.3	48	0.11
545	Rondeau muck	NHEL	5	0.0	134	0.11
712	Rosewood fine sandy loam	NHEL	3	0.2	86	0.11
I55A	Rosewood fine sandy loam, 0 to 2 percent slopes	NHEL	5	0.2	86	0.15
624	Rosy sandy loam	NHEL	5	0.2	86	0.11
625	Sandwick loamy fine sand	NHEL	5	0.2	134	0.11
328B	Sartell loamy fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
799	Seelyeville and Bowstring soils	NHEL	5	0.0	134	0.11
C799	Seelyeville and Bowstring soils	NHEL	5	0.0	134	0.11
540	Seelyeville muck	NHEL	5	0.0	134	0.11
C540	Seelyeville muck	NHEL	5	0.0	134	0.11
I58A	Seelyeville muck, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11
72	Shooker loam	NHEL	5	0.3	56	0.11
765	Smiley loam	NHEL	5	0.2	56	0.11
I59A	Smiley loam, 0 to 2 percent slopes	NHEL	5	0.2	56	0.11
653	Smiley muck	NHEL	5	0.0	134	0.11
I840A	Smiley muck, 0 to 1 percent slopes	NHEL	5	0.0	134	0.11

I60A	Smiley mucky loam, depressional, 0 to 1 percent slopes	NHEL	5	0.2	134	0.11
267B	Snellman fine sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
267D	Snellman fine sandy loam, 12 to 25 percent slopes	PHEL	5	0.2	86	2.20
267C	Snellman fine sandy loam, 6 to 12 percent slopes	NHEL	5	0.2	86	0.99
1993B	Snellman-Wykeham complex, 1 to 6 percent slopes	NHEL	5	0.2	86	0.23
2024B	Snellman-Zimmerman complex, 1 to 8 percent slopes, pitted	NHEL	5	0.2	86	0.47
199B	Sol cobbly sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
199C	Sol cobbly sandy loam, 6 to 12 percent slopes	NHEL	5	0.2	86	0.99
147	Spooner silt loam	NHEL	5	0.4	56	0.11
432	Strandquist loam	NHEL	3	0.3	86	0.11
I61A	Strandquist loam, 0 to 2 percent slopes	NHEL	3	0.3	86	0.11
I104A	Strandquist loam, dense till, 0 to 2 percent slopes	NHEL	3	0.3	86	0.11
243	Stuntz fine sandy loam	NHEL	5	0.3	86	0.15
C243	Stuntz fine sandy loam	NHEL	5	0.3	86	0.15
1991	Stuntz loam	NHEL	5	0.3	86	0.11
626B	Suomi loam, 1 to 6 percent slopes	NHEL	3	0.4	56	0.32
626D	Suomi loam, 12 to 25 percent slopes	HEL	3	0.4	56	2.20
626C	Suomi loam, 6 to 12 percent slopes	HEL	3	0.4	56	0.99
H88	Suomi-Aeric Glossaqualfs, loamy association, gently undulating to hilly	HEL	3	0.4	56	0.99
H87	Suomi-Aeric Glossaqualfs, loamy association, nearly level and undulating	NHEL	3	0.4	56	0.32
514	Tacoosh muck	NHEL	5	0.0	134	0.11
628	Talmoon muck	NHEL	5	0.0	134	0.11
C628	Talmoon muck	NHEL	5	0.0	134	0.11
627	Tawas muck	NHEL	4	0.0	134	0.11
1086	Urban land-Cormant complex	NHEL	5	0.2	134	0.11
1085B	Urban land-Graycalm complex, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
1085C	Urban land-Graycalm complex, 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
240B	Warba fine sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
C240B	Warba fine sandy loam, 1 to 6 percent slopes	NHEL	5	0.2	86	0.32
240C	Warba fine sandy loam, 6 to 12 percent slopes	NHEL	5	0.2	86	0.99
C240C	Warba fine sandy loam, 6 to 12 percent slopes	NHEL	5	0.2	86	0.99
J7	Warba-Stuntz association, nearly level and undulating	NHEL	5	0.2	86	0.32
538	Waskish peat	NHEL	5	0.0	134	0.11
CW	Water	NHEL				
IWa	Water	NHEL				
B58B	Wurtsmith-Meehan complex, 0 to 4 percent slopes	NHEL	5	0.2	134	0.11
121	Wykeham fine sandy loam	NHEL	5	0.2	86	0.32
2022B	Wykeham-Baudette, till substratum complex, 1 to 4 percent slopes	NHEL	5	0.4	48	0.15
2034B	Zimmerman fine sand, 0 to 6 percent slopes	NHEL	5	0.2	134	0.32
158B	Zimmerman loamy fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
C158B	Zimmerman loamy fine sand, 1 to 6 percent slopes	NHEL	5	0.2	134	0.32
158C	Zimmerman loamy fine sand, 6 to 12 percent slopes	NHEL	5	0.2	134	0.99
2017B	Zimmerman-Andrusia complex, 1 to 8 percent slopes	NHEL	4	0.2	134	0.32

2017E	Zimmerman-Andrusia complex, 15 to 30 percent slopes	HEL	4	0.2	134	3.00
2017C	Zimmerman-Andrusia complex, 8 to 15 percent slopes	NHEL	4	0.2	134	1.80
2020B	Zimmerman-Snellman complex, 1 to 8 percent slopes	NHEL	5	0.2	86	0.47
2020E	Zimmerman-Snellman complex, 15 to 30 percent slopes	HEL	5	0.2	86	2.60
2020C	Zimmerman-Snellman complex, 8 to 15 percent slopes	PHEL	5	0.2	86	1.80